



Series & Parallel Pump Apparatus (Variable Speed and DAQ Software) (SMT-FM-22-A)

This Series/Parallel Pump Test Rig enables students to measure the pump characteristic curves for centrifugal pumps. The unit is fitted with sensors for pressure and flow rate. The microprocessor-based measuring technique is well protected in the housing. The measured values are transmitted directly to a PC via USB where they can be analyzed using the software included. As a result of its clear layout, the unit is suitable for demonstrations and for student experiments.

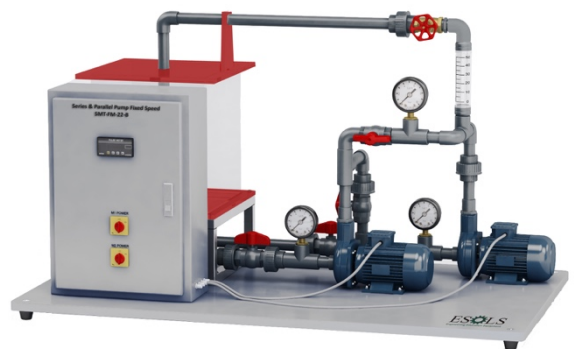
TECHNICAL SPECIFICATIONS

Specifications:

- Compact stand-alone unit.
- Two identical centrifugal Pumps.
- Transparent PMMA tank as intake tank.
- Ball valves used to switch between series and parallel operation
- Sensors at inlet and outlet of each pump and Digital
- Sensor for measuring flow rate.
- ESOLS software with control functions and data acquisition via USB under Windows 7, 8.1, 10

Technical Data:

- Pumps:
 - Centrifugal qty=02
 - Power 1/2hp, 0 to 3000rpm variable speed.
 - Max. flow rate= 35L/min H=30m
- Tank:
 - PMMA with PVC Fittings
- Measuring Instruments
 - Pressure inlet: -1 to 1.5Bar qty=02
 - Pressure Outlet: 0 to 2 Bar qty=01
 - Flow Rate: 10 to 110L/min



Experimental Data:

- Investigation of pumps in series and parallel configuration
- Determining the head
- Recording the pump characteristics
- Determining the hydraulic power
- Determining the operating point